Other Supporting Concepts

Discussion

The OMFTS concept reveals new ways of thinking about our primary mission of littoral power projection. Other supporting concepts build upon its theme, describing different aspects of future operations. Through wargaming and experimentation we identify and exploit the more promising concepts and supporting technologies for subsequent assessment. The Marine Corps' Warfighting Laboratory serves as the focal point for operational reform, and is charged with evaluating new and promising concepts and technologies and assessing their total impact on the Corps' warfighting capability. The Marine Corps is actively evaluating the following concepts intended to transform the Corps' operational capabilities:

- ***Ship To Objective Maneuver (STOM):*** STOM describes the tactical implementation of OMFTS through the application of the tenets of maneuver warfare to amphibious operations. It builds upon many of the themes introduced in OMFTS such as use of the sea as maneuver space, sea basing, and elimination of the requirement for a traditional beachhead. A departure from the traditional, linear form of amphibious operations practiced during most of this century, STOM envisions amphibious assaults in which highly mobile surface and vertical lift platforms launch from over the horizon attack positions, directly against objectives deep inland. The concept calls for exploitation of advanced navigation and information sharing technologies to allow landing force tactical commanders to monitor and coordinate the maneuver of their units throughout the operation. These technologies will also enable commanders to take advantage of enemy gaps and fleeting opportunities to overwhelm an adversary through the application of flexible, high tempo operations.

- ***Maritime Prepositioning Forces (Future) (MPF(F)):*** This is the concept by which next-generation MPFs will contribute to forward presence and power projection: capabilities which will remain central to U.S. deterrence and conflict resolution strategies well into the future. The enhancements envisioned will expand the functionality of MPF across the full range of contingencies. The concept is described through five key "pillars" of future MPF operations: force closure, amphibious task force integration, indefinite sustainment, reconstitution and redeployment, and force protection.

MPF(F) envisions conducting operations from over the horizon. Exploiting the sea as maneuver space, the dispersed, mobile MPF will

complicate the enemy's targeting process and take advantage of extended stand-off ranges, which will enable our combatants to more effectively acquire and defeat incoming threats. The medium for movement for the MPF, the sea, also serves as a barrier to terrorists or special operations forces whose mission would be to strike at facilities established in the landing force rear. Whether major theater war or operations in support of smaller scale contingencies, the ability to reduce the landing force's footprint ashore by basing it at sea will reduce exposure to threats from hostile forces, individuals, and the physical environment itself.

- ***Sustained Operations Ashore:*** The inherent flexibility of the MAGTF, merged with new technologies, will permit the future MAGTF to function as an operational maneuver element during sustained operations ashore. As an operational maneuver element, the MAGTF can be used to pave the way for operations by other elements, as a decisive force to unhinge the enemy's operational centers of gravity, or as an exploitation force to take advantage of opportunity on the battlefield. The role of the MAGTF in Sustained Operations Ashore will be different in the 21st Century. The battlespace of the future will often be nonlinear and lack large, easily targeted enemy formations. Critical vulnerabilities will be difficult to discern and difficult to engage. Physical occupation of large terrain will be less important than focused attacks aimed at reducing the enemy's ability and will to fight. The MAGTF will remain a general-purpose force, but one capable of executing a series of precise, combat actions. The inherent flexibility, versatility, and responsiveness of the

MAGTF and its incorporation of emerging technologies will permit an expanded role for the Marine Corps in future sustained joint operations.

❑ ***Beyond C2: Comprehensive Command and Coordination of the MAGTF:*** In the next century we are likely to see Marines conducting humanitarian operations, peacekeeping, and high intensity combat — all on the same day and in the same operating area. Execution of these diverse missions will require Marines to routinely work side by side with government, non-government, and international agencies. Beyond C2 outlines a transition from a traditional notion of command and control to the concept of command and coordination, wherein "control" is a part of effective command, and not resident in the technologies used. The aim of Beyond C2 is to empower commanders at every level to focus resources on a mission, while enabling the inventiveness and initiative of subordinates. Ultimately, future comprehensive command and coordination seeks to provide increased freedom of action to the operational forces; and the capability to provide superior command will further Marine Corps' ability to apply the tenets of OMFTS across the full spectrum of operations.

Beyond C2 suggests going beyond conventional forms of military power and incorporating all elements of national power in support of national objectives through a seamless command information architecture. This "reachback" access to non-traditional elements of power will give MAGTF commanders an improved ability to detect emerging crises, effect deterrent action, respond where necessary, and resolve threats to national interests. Specifically, the concept envisions a capability to coordinate, collaborate, and ultimately integrate the intellectual, diplomatic, experimental, and material power of the military, academia, industry, government, and non-government organizations to address the challenges of the 21st Century. The Marine Corps has already taken the first steps toward this capability through its efforts with the Chemical Biological Incident Response Force (CBIRF). The Marine Corps has tapped into the expertise of Nobel Laureate, Dr. Josh Lederberg, and others, to assist in the event of a chemical/biological attack. As the head of the reachback staff, Dr. Lederberg and his team join CBIRF at the scene of response via telecommunications and provide valuable diagnostic and treatment information. It is not difficult to visualize the expansion of the concept to a point where the expertise of chemical companies, computer and software firms, banks, and environmental groups can be made available to commanders operating on the battlefields of the 21st Century.

❑ ***MAGTF Aviation and Operational Maneuver from the Sea:*** MAGTF Aviation embraces a future environment characterized by increased chaos and instability. It describes the inherent capabilities unique to Marine Aviation, which make it an essential combined arms element of the MAGTF, and seeks to apply anticipated future aviation capabilities within the context of OMFTS requirements. MAGTF Aviation examines Aviation Combat Element (ACE) contributions as a catalyst to the MAGTF's overall capability through three primary activities: coordination, power projection and sustainment. MAGTF Aviation postulates that future operations will require even greater interdependence and reliance between the elements of the MAGTF. As ACE functional areas evolve, they will serve to bridge legacy systems with future capabilities. Although the activities embedded in ACE functional areas will remain valid for the foreseeable future, MAGTF Aviation acknowledges the requirement for closer correlation of its functions with those of the MAGTF. Therefore, this concept describes the ACE and its capabilities as an integral, indispensable element of the MAGTF's combat power, while calling for a vastly increased synergy between the elements that will enable the MAGTF to successfully conduct future operations in the littorals.

❑ ***Military Operations on Urbanized Terrain (MOUT):*** Given current projections of dramatic increases in urbanization, especially in the volatile developing world, Marines are preparing for extensive operations in cities. Historically, MOUT have been attrition style operations, relying upon overwhelming firepower to achieve the destruction of the enemy's

materiel assets. Such attrition style combat exacts a toll in casualties and infrastructure destruction. In the future, the Marine Corps will adapt maneuver warfare to the urban environment to accomplish its mission at significantly lower human and material costs. Marines will achieve the transformation to urban maneuver warfare through enhancements in the following seven areas: command and control, measured firepower, mobility, awareness, adaptability, force protection, and sustainability.

MOUT Advanced Concept Technology Demonstrations, co-sponsored by the Marine Corps Warfighting Laboratory (MCWL) and the U.S. Army's Dismounted Battlespace Battle Lab (DBBL), include numerous separate service and joint experiments to explore technological and tactical solutions for 32 identified urban warfighting requirements. Additionally, Project Metropolis, an initiative that evolved from the urban combat experiment in Urban Warrior, will focus on refinements and improvements at the tactical level.

- ***Advanced Expeditionary Fire Support:*** This concept proposes a combined system capable of providing fire support across the range of expeditionary operations. This system must be flexible, robust and responsive, providing all categories of fire support, from devastating lethal fires to tailored non-lethal fires. It must offer an optimal mix of engagement options, including both precision-guided munitions and precisely delivered general-purpose ordnance. OMFTS emphasizes seabasing, to include seabased naval and aviation fire support. Advanced Expeditionary Fire Support recognizes and embraces this principle, but identifies a continuing requirement for shore-based systems, as well.

- I***nformation Operations (IO):*** IO is an integrating concept that facilitates the warfighting functions of command and control, fires, maneuver, logistics, intelligence, and force protection. Not simply another "arrow" in the MAGTF commander's quiver, IO is a broad-based capability that "makes the bow stronger". Information operations involve actions taken to affect adversary information and information systems while defending our own. They consists of Offensive IO (PSYOPS, Physical Destruction, Deception, Electronic Warfare, OPSEC and Computer network attack), Defensive IO (physical security, Information Assurance, Electronic Protection, Counter PSYOPS/Intel, etc), Public Affairs and Civil Affairs. In the future, IO conducted by MAGTFs will be focused upon the information-oriented activities that will best support the traditional application of combat power. Specifically, Marine Corps IO will support maneuver warfare through actions to deny, degrade, disrupt, or destroy an enemy commander's ability to command and control his forces.

Information operations will not be conducted in a vacuum; rather, they will complement the traditional uses of military force and be carefully planned and fully integrated at all levels, tactical through national.

- ***Anti-Armor Operations:*** Marines will likely face hostile armored fighting vehicles in most future conflicts, to include smaller-scale contingencies. Further, Marines will frequently conduct expeditionary operations in the complex terrain which characterizes the urban littoral; and this environment will present unique challenges in locating, identifying, and engaging armored vehicles. New, sophisticated anti-armor systems are under development, as are active protection systems, advanced armor, and other countermeasures that will likely serve to maintain the status of armored vehicles as formidable combat platforms.

Anti-Armor Operations provides a future vision for addressing enemy armor. The concept outlines a fully integrated approach linking information operations with lethal and non-lethal fires. It starts with the

MAGTF commander, who will use enhanced situational awareness and information operations to deceive, confuse, and immobilize enemy defenders. He will exploit a command and coordination system that will provide an accurate and current tactical picture which, when integrated with the full range of seabased fires, will render enemy armored forces unable to move, sustain themselves, or effectively threaten friendly maneuver.

❑ ***Naval Mine Countermeasures (MCM) in Future Littoral Power Projection***: Jointly approved by CG, MCCDC and Commander, Naval Warfare Doctrine Command, the Concept for Future Naval Mine Countermeasures in Littoral Power Projection (Future MCM) will serve as the basis for future developments in naval MCM. It addresses MCM in the context of five "tactical situations" which frame requirements pertinent to littoral power projection operations. These are: transiting Sea Lines of Communications/Choke Points; Ship-to-Objective Maneuver; Carrier Battle Group/Amphibious Ready Group Operating Areas; operations in support of port break-in, break-out, and clearance; and independent operations.

Future MCM challenges existing notions. It focuses on a "mine avoidance" capability as the goal for naval forces. This capability will support the application of the principles of maneuver warfare to amphibious operations. Naval expeditionary forces of the 21st Century will employ a combination of "organic" MCM capabilities, which will be immediately available to forward-deployed naval forces, and "supporting" capabilities that can be rapidly deployed for augmentation, as required.

❑ ***Seabased Logistics:*** Seabased Logistics proposes methods to support a full spectrum of littoral operations, and outlines implementing capabilities for Operational Maneuver from the Sea, while retaining joint

interoperability. The key tenets considered in this concept are seabased primacy, demand reduction, in-stride sustainment, adaptive response / joint operations capability, and the ability to close and reconstitute forces at sea. Overall, the concept seeks to employ improved logistics tactics, techniques, and procedures to deliver flexible, highly responsive support for future naval and joint operations. Seabased Logistics embraces existing and emerging commercial processes to expand the range, speed, and magnitude of tactical and operational sustainment. A primary enabler will be the coupling of seabased ships to objective distribution with network-based, automated logistics information to provide in-stride sustainment for maneuvering and fighting naval expeditionary forces. To ensure relevance, seabased logistics capabilities must be sufficiently flexible and suitably robust to overcome the challenges of future asymmetric operational environments.

❑ ***Other Operational Concepts:*** Additionally, the Marine Corps is actively evaluating the following concepts:

- *Other Expeditionary Operations*

- *Military Operations in a Riverine Environment*

Marine Corps Position

Creating new operational concepts to conduct future battlefield operations and developing innovative force designs that provide versatile organizational and employment arrangements are essential to Marine Corps success in the 21st Century. In order to realize these objectives, we must leverage new advanced technologies via emerging operational concepts to redefine how Marine forces will conduct successful operations across the conflict spectrum.